and

PATENT

Amendments to the Claims

Following is a complete set of claims as amended with this Response. This complete set of claims excludes cancelled claims 13 and 18.

1. (Previously Presented) A method for detecting an evoked response in a cardiac stimulation device implanted in a patient, the device having an evoked response detection algorithm, the method comprising:

receiving one or more signals from a position sensor; processing the one or more signals to determine an orientation of the patient;

modifying the evoked response detection algorithm based on the detected orientation of the patient.

- 2. (Previously Presented) The method of claim 1, wherein the evoked response detection algorithm is modified by calibrating the algorithm using one or more parameter values pertaining to the detected orientation of the patient.
- 3. (Previously Presented) The method of claim 1, wherein the evoked response detection algorithm is modified by selecting one or more parameter values based on the detected orientation of the patient.
- 4. (Previously Presented) The method of claim 2, further comprising: providing a first set of parameter values that correspond with a first orientation of the patient;

providing a second set of parameter values that correspond with a second orientation of the patient; and

modifying the set of parameter values to the first set or the second set based on the detected orientation of the patient.

- (Currently Amended) The method of claim 1, further comprising:
 disabling an automatic capture detection function if the orientation of the patient is unstable.
 - 6. (Cancelled)
- 7. (Previously Presented) An implantable cardiac device comprising: a memory configured to store plural sets of parameter values corresponding to various patient states;
- a sensor that is operative to generate one or more signals indicative of a patient state; and
- a controller that is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and use the corresponding set of parameter values to process sensed electrical activity;

wherein the controller is configured to modify an evoked response detection algorithm by:

retrieving a position set comprising a plurality of parameter values pertaining to the orientation of the patient; and

calibrating the evoked response detection algorithm using the position set of parameter values.

8. (Previously Presented) The system of claim 7, wherein the controller is configured to calibrate the evoked response detection algorithm by:

replacing the position set of parameter values with a new position set of parameter values in the evoked response detection algorithm; and

Serial No. 10/053,462

Page 3 of 10

Docket No. A01P1083

employing the new operating set in the evoked response detection algorithm.

9. (Previously Presented) The system of claim 7, wherein the controller is further configured to:

establish a first setting for the position set of parameter values when the patient is vertically oriented;

establish a second setting for the position set of parameter values when the patient is horizontally oriented; and

modify the set of parameter values to the first setting or the second setting based on the orientation of the patient.

10. (Previously Presented) An implantable cardiac device comprising:

a memory configured to store plural sets of parameter values corresponding to various patient states;

a sensor that is operative to generate one or more signals indicative of a patient state; and

a controller that is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and use the corresponding set of parameter values to process sensed electrical activity;

wherein the controller is further configured to disable an automatic capture detection function to prevent false loss of capture detection when the signal indicates that an orientation of the patient is changing.

11. (Cancelled)

PATENT

- 12. (Previously Presented) A method for modifying a detection algorithm implemented by an implantable stimulation device, comprising:
- receiving one or more signals indicative of a patient state; processing the one or more signals to determine the patient state; and modifying the detection algorithm based on the determined patient state; wherein receiving one or more signals comprises receiving one or more position signals.
 - 13. (Cancelled)
- 14. (Previously Presented) A method for modifying a detection algorithm implemented by an implantable stimulation device, comprising:

receiving one or more signals indicative of a patient state; processing the one or more signals to determine the patient state; and modifying the detection algorithm based on the determined patient state; wherein receiving one or more signals comprises receiving one or more position signals and one or more activity signals.

- 15. (Previously Presented) The method of claim 14, further comprising providing plural sets of parameter values corresponding to various patient states, and wherein modifying the detection algorithm further comprises using the corresponding set of parameter values based on the determined patient state.
 - 16. (Cancelled)

17. (Previously Presented) An implantable cardiac device comprising: a sensor that is operative to generate one or more signals indicative of a patient state; and

a controller that is in communication with the sensor, the controller being programmed to apply a detection algorithm to received electrical activity signals, wherein the controller is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and adjust one or more parameter values of the detection algorithm based on the determined patient state; wherein the sensor comprises a position sensor.

18. (Cancelled)

19. (Previously Presented) An implantable cardiac device comprising:
a sensor that is operative to generate one or more signals indicative of a patient state: and

a controller that is in communication with the sensor, the controller being programmed to apply a detection algorithm to received electrical activity signals, wherein the controller is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and adjust one or more parameter values of the detection algorithm based on the determined patient state;

wherein the sensor comprises a position sensor, and further comprising an activity sensor that is operative to generate one or more signals indicative of an activity level of the patient.

20. (Previously Presented) The implantable cardiac device of claim 19, wherein the controller is operative to maintain a plurality of sets of parameter values corresponding to the respective patient states, and wherein the controller adjusts the

Serial No. 10/053,462

Page 6 of 10

Docket No. A01P1083

PATENT

detection algorithm by using one of the sets of parameter values based on the detected patient state.

21. (Previously Presented) An implantable cardiac device comprising: a computer readable medium encoded with an evoked response detection algorithm;

a position sensor to generate one or more position signals indicative of an orientation of a patient; and

a controller to receive the one or more position signals from the position sensor, to process the one or more position signals to determine the orientation of the patient, and to modify the evoked response detection algorithm computer based on the detected orientation of the patient.

- 22. (Previously Presented) The implantable cardiac device of claim 21, wherein the evoked response detection algorithm is modified by calibrating the algorithm using one or more parameter values pertaining to the detected orientation of the patient.
- 23. (Previously Presented) The implantable cardiac device of claim 21, wherein the evoked response detection algorithm is modified by selecting one or more parameter values based on the detected orientation of the patient.

BEST AVAILABLE COPY

Serial No. 10/053,462

Page 7 of 10

Docket No. A01P1083

PATENT

- 24. (Previously Presented) The implantable cardiac device of claim 22, further comprising:
 - a first set of parameter values that correspond with a first orientation of the patient; and
 - a second set of parameter values that correspond with a second orientation of the patient; and

wherein the set of parameter values is modified to the first set or the second set based on the detected orientation of the patient.